

Massachusetts All-Payer Claims Database:

Lessons Learned: How Analyses Based on Health Care Quality and Cost Council Data Assisted in APCD Editing

November 22, 2011



Introductions

- Betty Harney (Director of Data Standardization and Enhancement)
- Kathy Hines (Director of Data Compliance and Support)
- Young Joo (Director of Data Strategies)
- Marc Prettenhofer (Project Manager – Senior Business Analyst)
- Paul Smith (APCD Liaison)
- Adam Tapply (Intern)

Objectives for today's workgroup meeting

- Review feedback from last session
- Update group on publication of APCD edits
- Discuss challenges of editing and determining 'accurate' data
- Elicit feedback from participants on potential improvements to the edit process

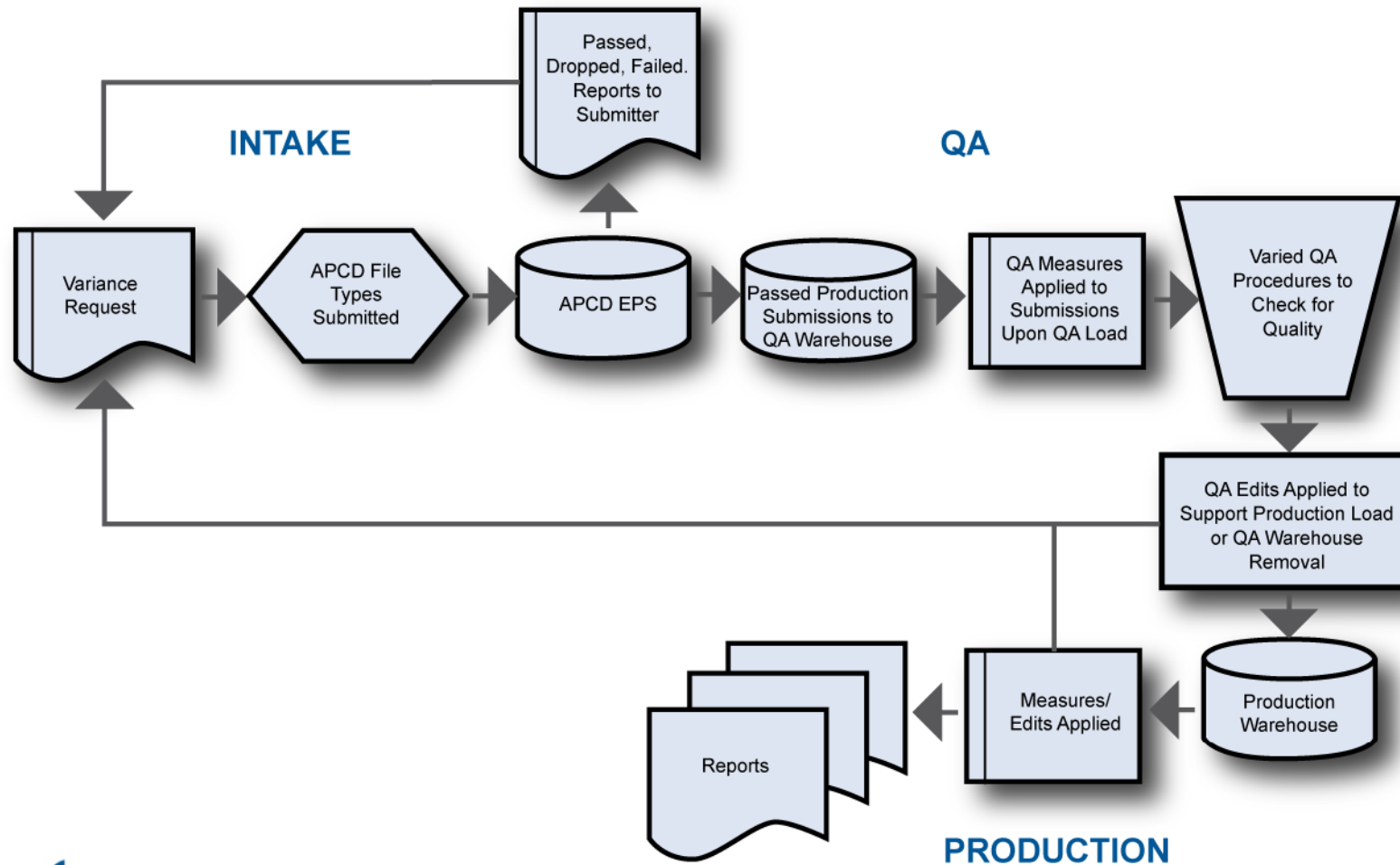
Addressing technical workgroup feedback and questions

- Encounter Data – how is this handled ? What is collected?
- DRG – which ones are placed in the APCD? Can a researcher get multiple years of data with the same DRG type and version?
- Final Claims – how are they handled and identified? How are partial rebates handled? – i.e. claim initially reported as \$150 and then a second claim for the same service is submitted for -\$50 – how is this shown in the APCD?
- Is there membership/enrollee data in the APCD? It's critical to analyze the entire market because that's the only way to know how many people are non-users of insurance. What demographic data is available? For example, location of residence – in last cost report analyses we looked at people that left their “community” to get care in Boston.
- Who is in the APCD – public and private payer data? What about person living in MA but have insurance from employer outside MA – getting more common with telecommuting options.

Addressing technical workgroup feedback and questions

- Are hospital transfers identified?
- Any information on premiums or subsidies in the APCD?
- Can you link a person across plans as a single person can have multiple plans at the same time - most common examples are dual eligibles (Medicare and Medicaid), and person with Medicare Part D, Medicare Supplemental Plans. Also want to link people across years.
- Are dental only and vision only plans included in the APCD?
- Are Pharmacy Benefit Managers included in the data?
- Linking providers across plans/program. Want to identify all claims (regardless of payer) for a single provider. Want to be able to group providers into clinics and Accountable Care Organization to link cost data with quality data from another source.

Review of Massachusetts APCD Data Flow



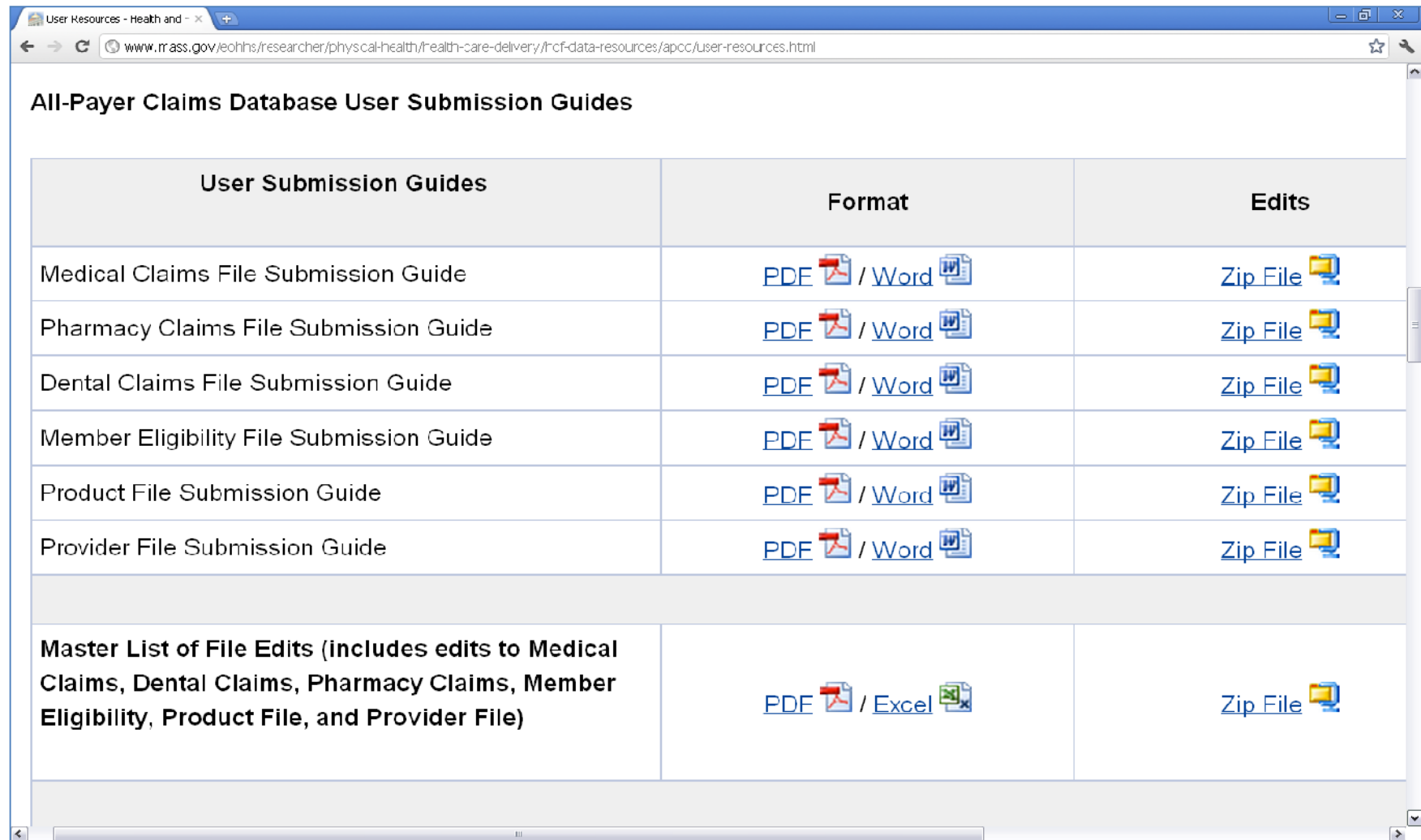
Publication of the APCD Edits

- Dimensions of Data Edits:
 - Data Element
 - Record
 - File
 - Cross-File (APCD QA Measures)
 - Aggregate (APCD QA Measures)
- APCD has published data element/record/file level edits. These are available to download from our website under User Resources:






















www.mass.gov/dhcfp/apcd

APCD User Resources

APCD Website - www.mass.gov/dhcfp/apcd



The screenshot shows a web browser window with the URL www.mass.gov/bohhs/researcher/physicalhealth/health-care-delivery/hcf-data-resources/apcd/user-resources.html. The page title is "All-Payer Claims Database User Submission Guides". Below the title is a table with three columns: "User Submission Guides", "Format", and "Edits". The table lists six submission guides, each with links to PDF and Word formats, and a link to a Zip File for edits. A final row, separated by a horizontal line, lists a "Master List of File Edits" with links to PDF, Excel, and a Zip File.

| User Submission Guides | Format | Edits |
|---|---|--|
| Medical Claims File Submission Guide | PDF  / Word  | Zip File  |
| Pharmacy Claims File Submission Guide | PDF  / Word  | Zip File  |
| Dental Claims File Submission Guide | PDF  / Word  | Zip File  |
| Member Eligibility File Submission Guide | PDF  / Word  | Zip File  |
| Product File Submission Guide | PDF  / Word  | Zip File  |
| Provider File Submission Guide | PDF  / Word  | Zip File  |
| | | |
| Master List of File Edits (includes edits to Medical Claims, Dental Claims, Pharmacy Claims, Member Eligibility, Product File, and Provider File) | PDF  / Excel  | Zip File  |

Comparison of Providers

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Hip Replacement

People with severe arthritis or other hip problems may choose to have hip replacement surgery. This is when doctors replace the damaged hip with a prosthetic (artificial or mechanical) one. [\(more\)](#)

Diagnostic classification: Hip Replacement (APR-DRG 301)

[Summarized Report](#)[View Detailed Report](#)[View Statewide
Procedure Costs](#)

Quality of Care

[\(more\)](#)

| | Mount Auburn Hospital | New England Baptist Hospital |
|---------------------------------|---|---|
| Quality Rating | ★★ | ★★ |
| Statistical Significance | Not Different from State Average Quality | Not Different from State Average Quality |

Cost of Care

[\(more\)](#)

| | Mount Auburn Hospital | New England Baptist Hospital |
|---------------------------------|-------------------------|------------------------------|
| Cost Rating | \$ | \$\$\$ |
| Statistical Significance | Below Median State Cost | Above Median State Cost |

QCC Data Issues & Corrections: Currency Fields

- Currency Field issues uncovered during QCC data collection and analysis:
- Examples:
 - Amount fields missing data
 - Erroneous usage of decimal placing
 - All 9s used to denote missing/not applicable
- QCC Corrections:
 - Resubmission of entire data by carrier
 - Submission of a patch file by carrier
 - Manual intervention

APCD Intake Rules

| Field ID | Data Element Name | Standard Threshold |
|----------|--------------------|--------------------|
| MC061 | Quantity | 98.00% |
| MC062 | Charge Amount | 99.00% |
| MC063 | Paid Amount | 99.00% |
| MC064 | Prepaid Amount | 99.00% |
| MC065 | Copay Amount | 99.00% |
| MC066 | Coinsurance Amount | 99.00% |
| MC067 | Deductible Amount | 99.00% |

APCD Intake Edits

| Element | Element Name | Element Description | Edit ID | Message |
|---------|--------------------|---|---------|--|
| MC062 | Charge Amount | Do not code decimal point | 2151 | Charge Amount is required. |
| MC062 | Charge Amount | Do not code decimal point | 2610 | Charge Amount must be in integer (no decimal points) format and cannot be zero. |
| MC063 | Paid Amount | Includes any withhold amounts. Do not code decimal point. | 2611 | Paid Amount must be in integer (no decimal points) format and cannot be negative. |
| MC063 | Paid Amount | Includes any withhold amounts. Do not code decimal point. | 3781 | The Paid Amount is required when Claim Status (MC038) = 01,02,03,19,20, 21. |
| MC064 | Prepaid Amount | For capitated services, the fee for service equivalent amount. Do not include decimal point. | 2153 | Prepaid Amount is required. |
| MC064 | Prepaid Amount | For capitated services, the fee for service equivalent amount. Do not include decimal point. | 2612 | Prepaid Amount must be in integer (no decimal points) format and cannot be zero. |
| MC065 | Copay Amount | The preset, fixed dollar amount for which the individual is responsible Do not code decimal point | 2154 | Copay Amount is required. |
| MC065 | Copay Amount | The preset, fixed dollar amount for which the individual is responsible Do not code decimal point | 2613 | Copay Amount must be in integer (no decimal points) format and cannot be negative. |
| MC066 | Coinsurance Amount | Do not code decimal point | 2155 | Coinsurance Amount is required. |
| MC066 | Coinsurance Amount | Do not code decimal point | 2614 | Coinsurance Amount must be in integer (no decimal points) format and cannot be negative. |
| MC067 | Deductible Amount | Do not code decimal point | 2156 | Deductible Amount is required. |
| MC067 | Deductible Amount | Do not code decimal point | 2615 | Deductible Amount must be in integer (no decimal points) format and cannot be negative. |

QCC Data Issues & Corrections: Gender

- Gender Issue uncovered during QCC Data Collection and Analysis:
 - Gender code set was not standard across carriers
 - Usage of 1, 2, 3 as opposed to M, F, U
- QCC Corrections:
 - Contact carriers to determine data dictionary for code set
 - Perform data cleaning here to standardize the gender coding

APCD Submission Guide

Appendix B – Lookup Tables by Element

| File | Element | Data Element Name | Type | Type Description | Revised Length | Format | Description | Element Submission Guideline |
|------|---------|-------------------|------|------------------|----------------|------------|---------------------|------------------------------|
| ME | ME013 | Member Gender | Text | Lookup Table | 1 | tlkpGender | The Member's Gender | |
| | | | | | | | Gender Code | Gender |
| | | | | | | | F | Female |
| | | | | | | | M | Male |
| | | | | | | | O | Other |
| | | | | | | | U | Unknown |

APCD Intake Rules and Edits

| Field ID | Data Element Name | Standard Threshold |
|----------|-------------------|--------------------|
| ME013 | Member Gender | 100.00% |

| Element | Element Name | Element Description | Edit ID | Message |
|---------|--------------|---------------------|---------|--|
| ME | ME013 | Member Gender | 2395 | Member Gender is required. |
| ME | ME013 | Member Gender | 1950 | Member Gender must be within the valid domain of values. |

Data Issue: Provider Specialty

- General Issue :
 - Provider Specialty code set was not standard across carriers
 - Because of the wide differences between carriers, movement to a standardized code set on intake was not feasible.
- APCD Solution:
 - Allow carriers to determine data dictionary for carrier specific code set to be submitted to the Division.
 - Code set is loaded to our database tables.
 - Editing for each carrier goes against their individual code set.

APCD Submission Guide

| Element | Data Element Name | Type | Format | Length | Element Submission Guideline |
|---------|----------------------------|------|---|--------|---|
| MC032 | Service Provider Specialty | Text | External Code Source 13 - AND/OR - Carrier Defined Reference Table | 50 | As defined by payer. Dictionary for specialty code values must be supplied to DHCFP. Specialty codes shall include specialties for all medical, vision, behavioral health and dental providers. |

- Carrier Defined Reference Table
- Health Care Provider Taxonomy – National Uniform Claim Committee

APCD Intake Rules and Edits

| Field ID | Data Element Name | Standard Threshold |
|----------|----------------------------|--------------------|
| MC032 | Service Provider Specialty | 98.00% |

| File Type | Element | Element Name | Element Description | Edit ID | Message |
|-----------|---------|----------------------|--|---------|-----------------------------------|
| MC | MC032 | Service PV Specialty | As defined by payer, Dictionary for specialty code values, must be supplied during testing | 2121 | Service PV Specialty is required. |

What are the challenges of setting these edits and determining 'accurate' data?

Provider Specialty Data - Standardization

| | CARRIER 1 |
|------|---------------------|
| Code | Description |
| 1 | NON HCD SPECIALISTS |
| 10 | ANESTHESIOLOGY |
| 100 | NEWBORN |
| 101 | ACUPUNCTURE |
| 102 | Ambulance |
| 103 | ANATOMIC PATHOLOGY |

| | CARRIER 2 |
|------|------------------------------------|
| Code | Description |
| 020 | Biofeedback |
| 075 | Aerospace Medicine |
| 090 | Naturopathic Physician |
| 091 | Physician Assistant |
| 094 | Certified Surgical First Assistant |
| 098 | Urgent Care Medicine |
| 100 | Allergy & Immunology |

| | CARRIER 3 |
|------|---------------------------------------|
| Code | Description |
| 091 | OBSTETRICS |
| 93 | REPRODUCTIVE ENDOCRINOLOGY |
| 093 | REPRODUCTIVE ENDOCRINOLOGY |
| 98 | PSYC/MENTAL HEALTH NURSE PRACTITIONER |
| 098 | PSYC/MENTAL HEALTH NURSE PRACTITIONER |
| 100 | OPHTHALMOLOGY |
| 110 | SURGERY-ORTHOPEDIC |
| 120 | OTOLARYNGOLOGIST |

What are the challenges of setting these edits and determining 'accurate' data?

Currency Field Edits

| Element | Element Name | Edit ID | Message |
|---------|---------------|---------|---|
| MC062 | Charge Amount | 2610 | Charge Amount must be in integer (no decimal points) format and cannot be zero. |

APCD Data Challenges:

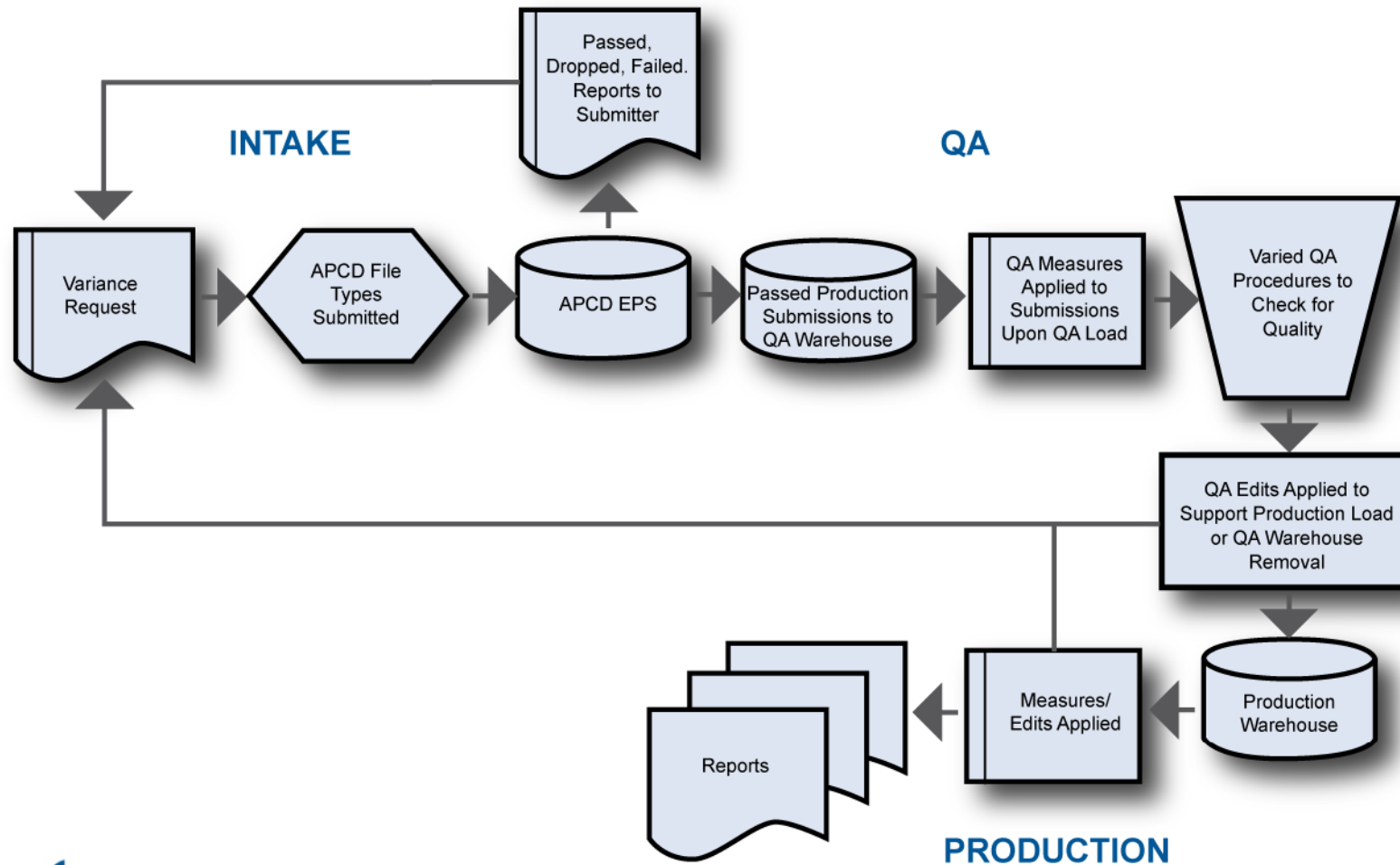
- QCC found issues with \$0 Charges
- APCD determined that it wanted the charges as they were submitted to the carrier, not how the carrier may have manipulated the data due to their payment rules
- Edit was instituted that Charge Amount may not be \$0

What are the challenges of setting these edits and determining 'accurate' data?

Carrier Challenges:

- Carriers have \$0 in their charge fields and must pull charges from the claims or do a code conversion to NULL
- Carriers must work with the Division to update variances to allow files to pass current edits
- Carriers state they have a legitimate need to have \$0 charges as reported by the provider. The most common reason we have heard is for state mandated vaccines.
- Liaisons are currently working with carriers to get copies of billing rules to educate us on the issue and provide documentation that may allow the edit to be updated in the future.

APCD Data Flow Map: Intake to QA



Topic for Next Month's Session:

APCD QA Measures

We want your ideas for measures!

Examples of APCD QA Measures

Claim Files:

- Average Charge Amount Per Claim Line
- Average Paid Amount Per Claim Line
- Average Co-Pay Amount Per Claim Line
- Average number of claims per unique member

What else?

Examples of APCD QA Measures

Eligibility File:

- Gender Distributions
- Age Distributions
- Geographic Distributions
- Distribution of Insurance Type / Product
- Unique Member Count
- Unique Subscriber Count

What else?

Examples of APCD QA Measures

Provider File:

- Office Type Distribution
- Entity Code Distribution
- Geographic Distributions
- Unique Provider Count

What else?

Q&A session

- Open discussion
- Questions from webinar participants
- Questions emailed to DHCFP (dhcfp.apcd@state.ma.us)

APCD Analytic and Technical Workgroups

Upcoming Schedule

APCD Analytic Workgroup
3rd Tuesday of each month

Dec. 20th @ 2pm

APCD Technical Workgroup
4th Tuesday of each month

Dec. 27th @ 2pm

For meeting materials and information, please visit:

www.mass.gov/dhcfp/apcd